

MATSKEVICH, N.V.; TETERYATNIK, A.F.; DMITRIYEV, V.V.; BRYZGALOVA, L.S.

Possibilities of selecting *Actinomyces sphaeroides* variants which have lost the ability to produce actinophage. *Antibiotiki* 10 no.8:693-701 Ag '65. (MIRA 18:9)

1. Vsësoyuznyy nauchno-issledovatel'skiy institut antibiotikov, Moskva.

BRYZGALOVA, M.

OX  
15

Tests of fungicides for the control of cereal smuts in the forest steppe zone of East Siberia. M. Bryzgalova, *Plant Protection* (U. S. S. R.) 3, 07-72(1955); *Res. Applied Mycol.* 15, 584. - With heavily bunted spring wheat seed the best control was given by formalin (1 to 3%) . With moderately infected seed grain CuCO<sub>3</sub> dust (10 to 20% Cu) at the rate of 150 g. dust per cwt. grain gave satisfactory control and 300 g. (9% Cu dust) was necessary for corn. control of slightly infected seed grain. New Russian dusts gave relatively good control in the following decreasing order, A-12, B-10, B-12 and N-arm (100 g. per cwt.). The first 3 slightly depress viability of the seed. Best control of loose smut of oats was given by formalin (1 to 8%) and Russian Germanian gave very nearly as good control. Odile E. Sheppard

## ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

LITERATURE SOURCE

CLASSIFICATION

EXPLANATION

OBVINTSEV, Val'demar Ivanovich; YAKIMUK, Vitaliy Zakharovich;  
KHAZANOV, Yevgeniy Kharitonovich; BRYZGALOVA, N., red.;  
VELICHKO, N., tekhn. red.

[Using large blocks in the installation of piping for  
industrial and sanitary systems] Montazh ukrupnennymi  
blokami truboprovodov sanitarno-tehnicheskikh sistem.  
Kiev, Gosstroizdat USSR, 1963. 55 p. (MIRA 17:1)

SYUN'I, Georgiy Kamilovich, dots., kand. tekhn. nauk; BRYZGALOVA,  
N.K., red.; GRISHKO, T.I., tekhn. red.

[Asphalt concrete for roads] Dorozhnyi asfal'tovyi beton.  
Kiev, Gosstroizdat, 1962. 233 p. (MIRA 15:12)  
(Roads, Bituminous concrete)

GREBENSHCHIKOVA, V. I. and BRYZGALOVA, R. V. (Radium Inst im V. G. Khlopin AS USSR)

"Determining the Distribution Constants of V. G. Khlopin by the Method of Partial Recrystallization of the Solid Phase"

Isotopes and Radiation in Chemistry, Collection of Papers of 2nd All-USSR Sci.Tech. Conf. on Use of Radioactive and Stable Isotopes and Radiation in National Economy and Science, Moscow, Izd-vo AM SSSR, 1953, 380pp.

This volume publishes the reports of the Chemistry Section of the 2nd All-URSS Sci. Tech. Conf. on Use of Radioactive and Stable Isotopes and Radiation in Science and the National Economy, sponsored by Acad. Sci. USSR and Main Admin for Utilization of Atomic Energy under Council of Ministers USSR, Moscow, 4-12 April 1957.

BRYZGALOVA, R.V.

AUTHORS: Grebenshchikova, V. I., Bryzgalova, R. V. 78-1-8/43

TITLE: The Determination of V. G. Khlopin's Constant of  
Distribution by Means of the Method of Partial  
Recrystallization of the Solid Phase  
(Opredeleniye konstanty raspredeleniya V. G. Khlopina metodom  
chastichnoy perekristallizatsii tverdoy fazy).

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 1,  
pp. 36-39 (USSR)

ABSTRACT: The authors describe a new method of determination of the  
aforesaid constant by which the result is much quicker  
obtained than with those actually applied (reference 1).  
Radioactive indicators are used, by which instead of a  
complete recrystallization of the solid phase, a partial  
recrystallization of the deposit is sufficient. This method  
is based upon the assumption of equal velocity of both the  
isotope and isomorphous exchange between the solid phase and  
the solution. If, together with the isomorphous ion (micro  
component), a radioactive isotope which forms part of the  
deposit to a saturated salt solution (macro component) which  
is in contact with the deposit, the quantity of the solid

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by Means of the Method of Partial Recrystallization of the  
Solid Phase

phase P, which at any time is in a real thermodynamical equilibrium with the solution, can be computed from the degree of isotope exchange. All values forming the respective equation can be easily determined by experiments. The quantity of the radioactive isotope which passed over into the solid phase, is radiometrically determined. If, in the formula by Khlopin (reference 1)

$$D = \frac{x}{1-x} \cdot \frac{(1-y)}{y} \quad (1)$$

in which case x and  $(1-x)$  is the share of the micro component in the solid ~~and~~ liquid phase, y and  $(1-y)$  that of the macro component, the value p - viz. the quantity of the micro component in the solid phase - is replaced by the value F, the expression for the calculation of the coefficient of recrystallization D is obtained with a partial recrystallization of the solid phase. All value should be

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expressed in percents. Lanthanum oxalate  $\text{La}_2(\text{C}_2\text{O}_4)_3 \cdot 9\text{H}_2\text{O}$ .

served as macro component. The isotope Am<sup>241</sup> ( $\alpha$  radiator, T = 475 years) was used as micro component. La<sup>140</sup> ( $\beta$  radiator, T = 1,65 days) was added as radioactive indicator. D was determined - for the purpose of comparison - by two previously known methods, viz. 1) Attainment of the equilibrium between the solid and liquid phase "from above" and "from below" by means of a long lasting recrystallization of the deposit in a saturated solution and 2) by crystallization of the solid phase from an oversaturated solution. 1) As shown in fig. (1), the authors did not succeed in achieving a full recrystallization and to compute from this the true value of the coefficient D. 2) The character of distribution of the micro component was different in the tests performed by the authors than was the one described by Khlopin and his collaborators (reference 1). The distribution took place according to the logarithmic law (reference 2) (table 1). The determination

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of D from the partial recrystallization of the solid phase.  
Lanthanum oxalate was first ground to powder. The velocity  
of recrystallization was much higher in this case than with  
lanthanum oxalate which was analytically produced. The data  
in table 2 show that the obtained value D is equal to the  
value of the coefficient of crystallization  $\lambda$  and that the  
value D remains constant independent from the re-  
crystallization-period of the solid phase. It is shown in  
fig. 1 and table 2 that apart from the experimental error,  
the value of the Khlopin-constant, obtained by different  
methods, has the same value. The proposed method has the  
advantage that it can be applied for difficultly soluble salts  
and at any temperature, up to the boiling of the solution.  
There are 1 figure, 2 tables, and 3 references, 2 of  
which are Slavic.

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The Determination of V. G. Khlopin's Constant of Distribution 78-1-8/43  
by Means of the Method of Partial Recrystallization of the  
Solid Phase

SUBMITTED: June 18, 1957

AVAILABLE: Library of Congress

Card 5/5

GREBENSHCHIKOVA, V.I.; BRYZGALOVA, R.V.; CHERNYAVSKAYA, N.B.; BOBROVA, V.N.

Cocrystallization of small quantities of substances with crystalline  
precipitates. Radiokhimia 1 no.1:11-21 '59. (MIRA 12:4)  
(Crystallization)

24390

5/186/60/002/002/004/022  
E071/E433

21/12/00  
AUTHORS: Grebenshchikova, V.I. and Bryzgalova, R.V.

TITLE: A study of the coprecipitation of Am and Eu with lanthanum oxalate

PERICIODICAL: Radiokhimiya, 1960, Vol.2, No.2, pp.152-158

TEXT: The coprecipitation of americium and europium with lanthanum oxalate was studied in order to elucidate the mechanism of coprecipitation and to determine the crystallization coefficients of the above microcomponents on their distribution between solid and liquid phases. The experimental methods used were those developed by V.G.Khlopin (Ref.3: Tr.Rad.inst., 4, 65 (1938)), mainly an isothermal removal of supersaturation and the method of partial recrystallization of the solid phase (Ref.4: ZhNKh, 3, 1, 36 (1958)). In preliminary experiments on coprecipitation of Am(III) ( $Am^{241}$  was used) with lanthanum oxalate, it was established that the latter gives stable supersaturated solutions and a complete separation of the solid phase requires an extremely long time, nevertheless americium is completely transferred into the solid phase before the equilibrium between

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lanthanum oxalate in the solid and liquid phase is reached. The experimental results indicate that in this system of supersaturated solutions of lanthanum oxalate, the formation of homogeneous ultramicrocrystallites and the homogeneous distribution of micro-components in the crystals precipitated cannot be assumed. The application of the Doerner-Hoskins logarithmic formula (Ref. 6: J. Am. Chem. Soc., 47, 675 (1925)) gave a constant crystallization coefficient  $\lambda$  indicating the logarithmic character of distribution of americium in crystals of lanthanum oxalate. An effort to obtain the true value of the equilibrium distribution coefficient  $D$  by the method of prolonged recrystallization of lanthanum oxalate in its saturated solution containing americium (attaining equilibrium from below) and by the method of prolonged recrystallization of mixed crystals of components in a saturated solution of the macrocomponent (attaining equilibrium from above) as well as by partial recrystallization of the solid phase, was unsuccessful. It was only established that the coefficient  $\lambda = 4.8$  lies between the values of the coefficient of crystallization  $D$  obtained by the "from below" and "from above" Card 2/4

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S/180/60/C02/C02/C04/022

A study of the coprecipitation ... E071/E433

methods. The experimental results show that americium forms mixed crystals with lanthanum oxalate with some enrichment of the solid phase with americium ( $D = 4.8 \pm 0.5$ ). A study of the dependence of the value of the coefficient of crystallization on the acidity of the solution and the concentration of oxalate ions in it showed that the coefficient of crystallization is independent of the acidity but decreases with increasing concentration of oxalate ions. The decrease in the value of  $\lambda$  with an increasing concentration of oxalate ions in the solution is explained by a decrease in the active concentration  $\text{Am}^{(III)}$  due to the formation of complex oxalate ions of  $\text{Am}^{(III)}$  which apparently do not form mixed crystals with lanthanum oxalate. The system  $\text{La}_2(\text{C}_2\text{O}_4)_3 \cdot 9\text{H}_2\text{O} \cdot (\text{Eu}^{3+}) \cdot \text{HNO}_3 \cdot \text{H}_2\text{C}_2\text{O}_4 \cdot 11\text{H}_2\text{O}$  was studied in order to compare the behaviour of transuranium and rare earth elements on coprecipitation with lanthanum oxalate. The experimental data obtained for europium (isotope  $\text{Eu}^{154}$  was used for experiments) were similar to those obtained for americium ( $\text{Am}^{(III)}$ ). The closeness of crystallization coefficients of americium ( $D = 1.8$ ) and europium ( $D = 3.8$ ) indicates that they cannot be separated by fractional crystallization with lanthanum oxalate. There are

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X

A study of the coprecipitation . . .

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E071/E433

3 figures, 7 tables and 7 references. 3 Soviet-bloc and 4 non-Soviet bloc. The three references to English language publications read as follows: G.Seaborg, I.Katz, The Transuranium Elements, 2, 1339, N.Y., T.L. (1949); J.Herman, Nuclear science abstracts, 12, 4, 1241 (1958); H.Deerner, W.Hockins, J.Am.Chem.Soc., 57, 675 (1925).

SUBMITTED: July 3, 1959

Card 4/4

214200

24391  
S/186/60/002/002/005/022  
E071/E433

AUTHORS: Grebenshchikova, V.I. and Bryzgalova, R.V.  
TITLE: A study of the coprecipitation of Y(III) with  
lanthanum oxalate

PERIODICAL: Radiokhimiya, 1960, Vol.2, No.2, pp.159-163

TEXT: The coprecipitation of yttrium with lanthanum oxalate was studied in order to compare its behaviour with that of americium and europium, as well as to determine the influence of a change in the ratio of solubilities of the components on the value of the coefficient of crystallization. The determination of the coefficient of crystallization was done by an isothermal removal of supersaturation in the same solutions as it was previously done for americium and europium (Ref.1:Radiokhimiya, 2, 2, 152, (1960)). The experimental results indicate that Y(III) coprecipitates with lanthanum and oxalate and this is combined with the formation of mixed crystals. The distribution of yttrium takes place according to the logarithmic law. The value of the coefficient of crystallization ( $D = 3.7 \pm 0.4$ ) is independent of the acidity of the solution within a range of 0.1 to 1.5 N HNO<sub>3</sub>. The coefficient of crystallization decreases with an increasing concentration of Card 1/3

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oxalate ions. This could be ascribed to unequal changes in the solubilities of the components but no direct relationship between the coefficient of crystallization and the ratio of the solubilities of components was found. Therefore, a decrease in the value of the coefficient of crystallization D should be related to a change in the ratio of active concentrations of the components, due to the formation of yttrium oxalate complexes. Although the crystallization coefficients of Am(III), Eu(III) and Y(III) in oxalate solutions are above unity, they differ too little from each other to enable the separation of these elements by fractional crystallization. However, on the basis of the observed dependence of crystallization coefficients on the concentration of oxalate ions, the following ranges of the concentration of the latter within which the formation of complex oxalate ions of Am(III), Eu(III) and Y(III) takes place were calculated: for Am(III)  $1.8 \times 10^{-7}$  to  $2.4 \times 10^{-7}$  g-ion/l; for Eu(III) and Y(III)  $0.7 \times 10^{-7}$  to  $1.8 \times 10^{-7}$  g-ion/l. Since the crystallization coefficient of yttrium decreases more rapidly with an increasing concentration of oxalate ions than the coefficients of americium and europium, the former has a higher tendency to the formation of complexes than the

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A study of the coprecipitation of .. E071/E433

two latter elements. There are 3 figures, 4 tables and 9 references: 7 Soviet-bloc and 2 non-Soviet-bloc. The two references to English language publications read as follows: R.Penneman, L.B.Asprey, International Conference of the peaceful uses of atomic energy, 838 (1955); T.Mellor, Record of Chem.Progress, 14 (2), 69 (1953).

SUBMITTED: July 3, 1959

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GREBENSHCHIKOVA, V.I.; BRYZGALOVA, R.V.

Coprecipitation of Am and Eu with lanthanum oxalate. Radiokhimia 2  
no.6:152-158 '60. (MIRA 14:4)

(Americium)  
(Europium)  
(Lanthanum oxalate)

GREBENSHCHIKOVA, V.I.; BRYZGALOVA, R.V.

Coprecipitation of Y (III) with lanthanum oxalate. Radiokhimiia 2  
no.6:159-163 '60. (MIRA 14:4)  
(Yttrium) (Lanthanum oxalate)

BRYZGALOVA, R.V.; CHERNITSKAYA, I.V.

Composition and solubility of lanthanum and yttrium oxalates.  
Radiochimia 3 no.4:478-485 '61. (MIRA 14:7)

(Lanthanum oxalate)  
(Yttrium oxalate)

L 55331-65 EWT(m)/EPF(n)-2/EWP(t)/EWP(b)/EWA(h) Peb/Pu-4 IJP(c) JD/MM/JS/  
GS

ACCESSION NR: AT5015386 UR/0000/65/000/000/0026/0030  
542.65:546.799.4+546.654:661.733

AUTHOR: Grebenshchikova, V. I.; Bryzgalova, R. V.; Chernitskaya, I. V.

TITLE: Coprecipitation of plutonium with lanthanum oxalate

SOURCE: AN SSSR. Otdeleniye obshchey i tekhnicheskoy khimii. Soosazhdeniye i adsorbtsiya radioaktivnykh elementov (Coprecipitation and adsorption of radioactive elements). Moscow, Izd-vo Nauka, 1965, 26-30

TOPIC TAGS: plutonium precipitation, lanthanum oxalate, crystallization coefficient, plutonium adsorption, ion exchange, plutonium complex

ABSTRACT: At 50°C, Pu(IV) coprecipitates with lanthanum oxalate to form mixed crystals, but the Pu content of the solid phase is considerably less (crystallization coefficient  $\lambda = 15$ ) than at 20°C ( $\lambda = 21$ ). To elucidate the causes of the decrease in  $\lambda$  of Pu with rising temperature, the value of  $\lambda$  (determined by isothermal removal of supersaturation) was studied as a function of the change in the composition of the liquid phase (change in the concentration of oxalic acid, which alters the degree of complexing of Pu) and as a function of the solubility ratio of the components. In the system under consideration,  $\text{La}_2(\text{C}_2\text{O}_4)_3 \cdot 8\text{H}_2\text{O} - \text{Pu}(\text{C}_2\text{O}_4)_2 - 1.5$

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ACCESSION NR: AT5015386

N HNO<sub>3</sub> - H<sub>2</sub>C<sub>2</sub>O<sub>4</sub>, no direct relationship was observed between  $\lambda$  and the solubility ratio of the components. Using an ion-exchange method of adsorption of Pu on KU-2 and EDE-10 resins, the authors arrived at the definite conclusion that the main factor affecting the change in the crystallization coefficient of Pu is the change in the active Pu concentration caused by the formation of a complex between Pu(IV) and oxalate ion. Indeed, the course of the curve representing the decrease in  $\lambda$  with increasing oxalic acid concentration is analogous to that of the decrease in the adsorption of Pu on the KU-2 cation-exchanger in the same solutions (see Fig. 1 of the Enclosure). In addition, a relationship exists in this system between the decrease in  $\lambda$  and the change in the composition of the solid phase. This decrease in  $\lambda$  may be due to a change in the parameters of the crystal lattice of lanthanum oxalate associated with the change La<sub>2</sub>(C<sub>2</sub>O<sub>4</sub>)<sub>3</sub>·9H<sub>2</sub>O  $\rightarrow$  La<sub>2</sub>(C<sub>2</sub>O<sub>4</sub>)<sub>3</sub>·8H<sub>2</sub>O, even though both crystal hydrates form monoclinic crystals. Orig. art. has: 2 figures and 6 tables.

ASSOCIATION: None

SUBMITTED: 05Aug62

NO REF Sov: 008

ENCL: 01

OTHER: 002

SUB CODE: IC, GC

Card 2/3

L 55341-65 EWT(m)/EPF(n)-2/EWG(m)/T/EWP(t)/EWP(b)/EWA(h) Feb/Pu-4  
IJP(c) RWH/JD/WW/JG/GS/RM

ACCESSION NR: AT5015387

UR/0000/65/000/000/0030/0034

542.65:546.799.4+546.654:661.733.1

AUTHOR: Grebenshchikova, V. I.; Bryzgalova, R. V.; Chernitskaya, I. V.

33

32

B+

TITLE: Coprecipitation of plutonium with lanthanum oxalate

SOURCE: AN SSSR. Otdeleniye obshchey i tekhnicheskoy khimii. Soosazhdeniye i adsorbsiya radioaktivnykh elementov (Coprecipitation and adsorption of radioactive elements). Moscow, Izd-vo Nauka, 1965, 30-34

TOPIC TAGS: plutonium precipitation, lanthanum oxalate, mixed crystal, crystallization coefficient, plutonium complex, ion exchange

ABSTRACT: Plutonium was coprecipitated with lanthanum oxalate at 50°C from mixed solutions of nitric acid and ammonium oxalate. At 50°C, Pu forms anomalous mixed crystals with lanthanum oxalate. The crystallization coefficient  $\lambda$  of Pu was determined by isothermal removal of supersaturation. To determine the cause of the decrease in  $\lambda$ , the latter was studied as a function of the ammonium oxalate concentration in the solution ( $\lambda$  dropped from 14 in 0.1 M  $(\text{NH}_4)_2\text{C}_2\text{O}_4$  to 11 in 0.25 M  $(\text{NH}_4)_2\text{C}_2\text{O}_4$ ). The character of the decrease of  $\lambda$  with concentration in ammonium oxalate was found to be different from that in solutions of nitric and

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ACCESSION NR: AT5015387

oxalic acid (see Fig. 1 of the Enclosure). This difference may be due to different concentrations of the "free"  $(\text{C}_2\text{O}_4)^{2-}$  ions, which alter the degree of complexing of Pu. No definite relationship was found to exist between  $\lambda$  and the solubility ratio of the salts. Using the adsorption of Pu on the KU-2 cation exchanger and EDE-10 anion exchanger, the authors found that as the ammonium oxalate concentration increases, a decrease in cationic adsorption from the corresponding solutions and a decrease in  $\lambda$  are observed. It is concluded that the decrease in  $\lambda_{\text{Pu}}$  is chiefly due to a drop in the active concentration of Pu(IV) caused by the formation of complex oxalate ions which cannot enter into the lattice of lanthanum oxalate, and is not due to the change in the solubility ratio of the components. Orig. art. has: 3 figures and 3 tables.

ASSOCIATION: None

SUBMITTED: 05Aug62

ENCL: 01

SUB CODE: IC, GC

NO REF Sov: 007

OTHER: 000

Card 2/3

L 55341-65

ACCESSION NR: AT5015387

ENCLOSURE: 01

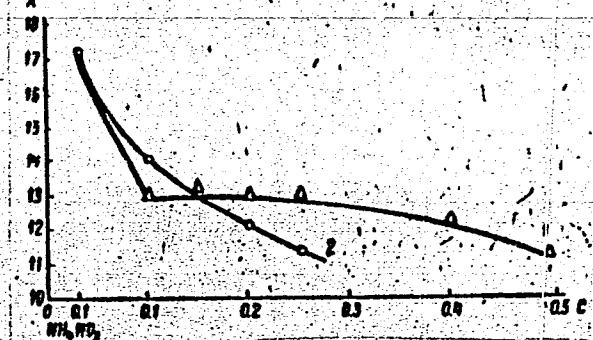


Figure 1. Variation of the crystallization coefficient of plutonium with changing composition of the liquid phase: 1 - variation of  $\lambda_{Pu}$  in solutions of nitric and oxalic acid; 2 - variation of  $\lambda_{Pu}$  in solutions of nitric acid and ammonium oxalate (1st point - value of  $\lambda_{Pu}$  in ammonium nitrate solution).

Card 3/3

BRYZGALOVA, V. A.

Brown Rust of Wheat under Conditions Prevalent in the Irkutsk-Nizne-Udinsk  
Region of East Siberia, Trudy po Zashchite Rastenii Vostochnoi Sibiri,  
vol. 2, no. 4, 1935, pp. 99-174. 404.9 V93

SO - SIRA SI 90-53, 15 December 1953

BRYZGALOVA, V. A.

Evaluation of the Relative Resistance of Spring Wheat Varieties to Bunt and  
Brown Rust in the Lake Baikal Region of East Siberia, Trudy po Zashchite  
Rastenii Vostochnoi Sibiri, vol. 2, no. 4, 1935, pp 175-203. 464.9 V93

SO - SIRA SI 90-53, 15 December 1953

BRYZGALOVA, V. A.

Tests of Fungicides for the Control of Cereal Smuts in the Forest-steppe Zone  
of East Siberia, Zashchita Rastenii, no. 3, 1935, pp. 67-72. 421 P942

SO - SIRA SI 90-53, 15 December 1953

BRYZGALOVA, V.A., kand.sel'skokhzoaystvennykh nauk

Effectiveness of a new smut-control agent l2a (Irkut  
shlak-arsin). Trudy VIZR no.1:244-248 '48.

(MIRA 11:?)

1.Irkutskiy opornyj punkt Vsesoyuznogo nauchno-issledovatel'skogo  
instituta zashchity rastenij.  
(Smuts) (Arsenic)

BRYZGALOVA, V. A.

The Problem of the Causes of Unstable Effectiveness of Some Dry Anti-Smut Preparations.  
Sbornik Trudov po Zashchite Rastenii Vostochnoi Sibiri, vol. 5, 1937, p. 62-73.

464.9 V93

SO - SIRA SI 90-53, 15 December 1953

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307130007-0

BRYZGALOVA, V. A.

On a New Intermediate Host of Brown Rust of Wheat, Puccinia triticina Eriks.,  
Sbornik Trudov po Zashchite Rastenii Vostochnoi Sibiri, vol. 5, 1937, pp. 75-88.  
464.9 v93

SO - SIRA SI 90-53, 15 December 1953

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307130007-0"

BRYZGALOVA, V. A.

On Temperature Conditions Required for the Germination of *Puccinia triticina*  
Erikss. Spores in East Siberia., Sbornik Trudov po Zashchite Rastenii Vostochnoi  
Sibiri, vol. 5, 1937, pp. 89-95. 464.9 v93

SO - SIRA SI 90-53, 15 December 1953

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307130007-0

BRYZGALOVA, V. A.

"A New Intermediate Host of Wheat Rust", Trudy po zashchite rasteniy Vostochnoy Sibiri, No. 5, 1937.

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307130007-0"

BRYZGALOVA, V. A.

Data on the Distribution of Cereal Rusts in East Siberia, Izvani Nauchno-Issledovatel'skikh Rabot Vsesoiuznogo Instituta Zashchity Rastenii za 1936 Goda,  
1937, pp. 143-144. 423.92 L541

SO - SIRA SI 90-53, 15 December 1953

BRYZGALOVA, V. A.

A New Aecial Host of Brown Rust of Wheat (Puccinia triticina Erikss.)  
Itogi nauchno-issled vateishch Rabot Vseso uznogo Instituta Zashchity Rastenii  
za 1936 Goda, 1937, pp. 146-148. 423.92 L541.

SO - SIRA SI 90-53, 13 December 1953

BRYZGALOVA, V. A.

Temperature Conditions Essential for Germination of Spores of Puccinia triticina  
Erikss. in East Siberia, Itogi Nauchno-Issledovatel'skikh Rabot Vsesoiuznogo  
Instituta Zashchity Rastenii za 1936 Goda, 1937, pp. 16 -167. L23.92 L54I

SO - SIRA SI 90-53, 15 December 1953

BRYZGALOVA, V. A.

Some Data on 'Zakuklivania' a Type of Virus Disease of Cats in Conditions of  
the Baikal Region, Vestnik Zashchity Rastenii, no. 3, 1957, pp. 121-125. 421 Pg42

SO - SIR SI 90-53, 15 December 1953

SNEZHALOVA, V. A.

"On the Problem of 'Zakuklivanie' of Oats in the Baikal Region," in Virus Diseases of Plants and Measures for Their Control, Works of the Conference on Virus Diseases of Plants 1940, Publishing House of the Academy of Science USSR, Moscow, 1941, pp. 120-132. 464.32 So8

SO: SIRA, SI 90-53, 15 December 1953

BRIZGALOVA, V. A.

"The Effectiveness of a New Disinfection Preparation 12 A (Irkutsk Arsine Cinders)," Sbornik Trudov Vsesoiuznogo Instituta Zashchity Rastenii, 1943, (p. 244-245).  
464.9 L5423.

SO: JIKA, SI 90-53, 15 December 1953

DRYZGALOVA, V. A.

"On the Biology of Puccinia Graminis Pers. F. Secalis," Trudy Vsesoyuznogo Instituta Zashchity Rastenii, no. 3, 1951, pp. 201-204. 421 P.

SO: SINA, SI 90-53, 15 December 1953

BRYZGALOVA, V. A., Ed.

"Vegetable gardening manual." Reviewed by A. Ya. Gutsevich, K. A. Slutsker. Sad. i og. No 4, 1952.

BRYZGALOVA, V. A., PONOMAREV, A. V.

"Effect of certain antibiotics on the immunobiological processes in the organism."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

FILATOV, Nikolay Aleksandrovich; BRYZGALOV, V.A., prof., doktor  
sel'khoz. nauk, retsenzent; SOINA, L.S., retsenzent;  
DAGAYEVA, T.S., red.; KOVALENKO, V.L., tekhn. red.

[Manual for the young vegetable grower] Spravochnik mo-  
lodogo ovoshchevoda; posobie dlja uchashchikhsia sel'skoi  
srednei shkoly. Moskva, Uchpedgiz, 1963. 310 p.  
(MIRA 17:1)

1. Prepodavatel' sredney shkoly No.1. goroda Ozery  
Moskovskoy oblasti (for Soina).  
(Vegetable gardening)

BRYZGALOV, V. I.

Mathematical Reviews  
Vol. 15 No. 2  
Feb. 1954  
Geometry

8/10-54  
LL

Nisnevič, L. B., and Bryzgalov, V. I. On a problem of  $n$ -dimensional geometry. Uspki Matem. Nauk (N.S.) 8, no. 4(56), 169-172 (1953). (Russian)

In an  $n$ -dimensional Euclidian space there are given  $n$  mutually orthogonal vectors  $a_1, \dots, a_n$ , with respective lengths  $\alpha_1, \dots, \alpha_n$ . For a given  $m$ ,  $m \leq n$ , what is the condition that there exists an  $m$ -dimensional subspace  $L_m$  in which the vectors  $a_1, \dots, a_n$  have projections of equal length? The authors answer with the theorem: The necessary and sufficient condition that  $L_m$  exists is that  $\alpha_i^2(\alpha_1^{-2} + \dots + \alpha_n^{-2}) \geq m$  ( $i = 1, 2, \dots, n$ ). W. E. Milne.

3

KUKLIN, G.V.; BRYZGALOVA, Ye.A.; YEL'TSOV, L.M.

Observations of the partial lunar eclipse of November 29, 1955  
at the Irkutsk Observatory. Astron.tsirk. no.168:19-21 '56.

(MLRA 9:8)

1. Irkutskaya gorodskaya astronomicheskaya observatoriya gosudar-  
stvennogo universiteta imeni A.A. Zhdanova.  
(Eclipses, Lunar--1955)

BRYZGALOVA, Ye.V., kand.ekon.nauk

Role and importance of the industrial cost index in evaluating  
the operation of combined industries. Trudy LIMI no.25:74-83  
'59. (MIR 12:11)

(Chemical industries--Costs)

BRYZGALOVA, Ye.V., kand.ekon.nauk; NATAROV, V.F., inzh.-ekonomist

Effect of the utilization of waste and by-products on the  
economy of the shales-gas industry. Trudy LNEI no.25:84-96  
'59. (MIRA 12:11)

(Kohtla-Järve--Oil shales)

BRYZGALOVA, Ye.V.; NATAROV, V.F.

Effectiveness of manufacturing chemical products from shale tars.  
Khim. i tekhn. gor. slan. i prod. ikh perer. no. 8:31-50 '60.  
(MIRA 15:2)

(Oil shales)  
(Chemicals industry)

BRYZGIN, Nikolay Yakovlevich, kapitan dal'nego plavaniya; MATSYUTO,  
Aleksandr Fedorovich, kapitan dal'nego plavaniya;  
FAKTOROVICH, Veniamin Isayevich, kapitan dal'nego plavaniya;  
MATYUSHINA, S.P., red; KLAPTSOVA, T.F., tekhn. red.

[Use of radar for the prevention of ship collisions] Ispol'zovanie  
radiolokatora dlia preduprezhdeniya stolknovenii sudov. Moskva,  
Izd-vo "Morskoi transport," 1962. 101 p. (MIRA 15:5)  
(Collisions at sea—Prevention) (Radar in navigation)

BRYZGIN, N.Ya., kapitan dal'nego plavaniya

Revision of the regulations for the prevention of ship collisions.  
Sudovozhdenie no.2:117-120 '62. (MIRA 17:4)

1. Baltiyskoye gosudarstvennoye morskoye parokhodstvo.

BRYZGIN, V.A.; BELOV, Ye.P.

Attachment to the APR-2 automatic device for hoisting and  
lowering rods. Nefteprom. delo no.7:31-32 '64. (MIRA 17:8)

1. Neftepromyslovoye upravleniye "Al'met'yevneft'" i Tatarskiy  
neftyanoy nauchno-issledovatel'skiy institut, g. Bugul'ma.

BRYZGIN, V.A.; BELOV, Ye.P.

Improving a clamp to fasten a KERK cable to pump lines. Nauch.  
i neft. obor. no. 7:32-33 - '64.

(MIA 14:1)

I. Ob"yedineniye Tatarskoy neftyanoy promyshlennosti i Tatarskiy  
neftyanoy nauchno-issledovatel'skiy institut, g. Bugulma.

BELOV, Ye.P.; BRYZGIN, V.A.

Simplified method for installing hydraulic piston pumps using  
a PSh-6-500 packer. Nefteprom, delo no.8:23-25 '64.

1. Tatarskiy neftyanoy nauchno-issledovatel'skiy institut, Bugul'ma,  
i PTO ob"yedineniya "Tatneft" . (MIRA 17:12)

BRYZGIN, V.A., Inzh.; BLOV, Ye.P., inzh.

Platform for the underground repair of oil wells using the  
"Bakinet" unit. Bezop. truda v prot. 9 no. 4:40 Ap 165.

(MIRA 18:5)

BELOV, Ye.P.; BRYZGIN, V.A.

Using the APR-2 device in the current repair of wells exploited  
by electric centrifugal pumps. Mash. i neft. obor. no. 9:13-14  
'64. (MIRA 17:11)

1. Tatarskiy neftyanoy nauchno-issledovatel'skiy institut, Bugul'ma,  
i Ob"yedineniye neftyanoy promyshlennosti Tatarskoy ASSR Ministerstva  
neftyanoy promyshlennosti SSSR.

TUYEZHOVA, Nina Aleksandrovna; Prinimali u-istiye: DEMINA, R.G.; BRYUZGINA, N.I.; ROSTOVTSEV, N.N., glavnnyy red.; GURARI, F.G., zamestitel' glavnogo red.; UMANTSEV, D.F., red.; DERBIKOV, I.F., red.; KAZARINOV, V.P., red.; KALUGIN, A.S., red.; KOLOBKOV, M.N., red.; MALIKOV, B.N., red.; MIKUTSKIY, S.P., red.; BOTVINNIKOV, V.I., red.; BUDNIKOV, V.I., red.; BOGOMYAKOV, G.P., red.; SURKOV, V.S., red.; SUKHOV, S.V., red.; BOCHAROVA, N.I., red.

[Physical properties of rocks in the West Siberian Plain.]  
Fizicheskie svoistva gornykh porod Zapadno-Sibirskoi nizmennosti.  
Moskva, Nedra, 1964. 127 p. (Sibir'skiy nauchno-issledovatel'skii  
institut geologii, geofiziki i mineral'nogo syr'ya. Trudy, no.31).  
(MIRA 18:7)

KISELEV, B.A., inzh.; EIPGART, A.A., otv.red.; PASHIN, M.A., red.; BORISOV, S.G., red.; BRISKIN, M.I., red.; BRYZGOV, N.N., red.; DYBOV, O.V., red.; ZIL'BERBERG, Ya.G., red.; LOZAR', A.S., red.; LUNEV, I.S., red.; NAGAYEV, P.V., red.; PEVZNER, Ya.M., red.; PRYADILOV, V.I., red.; RAMAYYA, K.S., red.; SAMOL', G.I., red.; SEDOVA, Ye.V., red.; TAMRUCHI, O.V., red.; CHAPKEVICH, V.A., red.; CHISTOVONOV, S.B., red.; SHKOL'NIKOV, E.M., red.; SMIRNOVA, G.V., tekhn.red.

[Investigation of the operation and gas-exchange of a loop-scavenged two-cycle motor-vehicle diesel engine] Issledovanie rabochego protsessa i gazoobmena dyukhtaktnogo avtomobilnogo dizelia s petlevoi produvkoi. Moskva, Mashgiz, 1961. 493 p. (Moscow. Gosudarstvennyi nauchno-issledovatel'skii avtomobil'nyi i avtomotornyi institut. Trudy, no.30).

(MIRA 16:8)

(Motor vehicles--Engines)

*BRYZGOV*  
GORELIK,A.M., inzhener; OSIPYAN,A.V., kandidat tekhnicheskikh nauk; otvetstvennyy redaktor; ZIL'BERBERG,Ya.G., inzhener; BRILING,N.R., doktor tekhnicheskikh nauk, professor; KALISH,G.G., doktor tekhnicheskikh nauk, professor; MEZIN,I.S., doktor tekhnicheskikh nauk; PEVZNER,Ya.M., doktor tekhnicheskikh nauk; KHRUSHCHEV,M.M., doktor tekhnicheskikh nauk, professor; BRYZGOV,N.N., kandidat tekhnicheskikh nauk; KOZLOVSKIY, I.S.; kandidat tekhnicheskikh nauk; LYTKIN,I.I., kandidat tekhnicheskikh nauk; RAMAYYA,K.S., kandidat tekhnicheskikh nauk; BUTYLKIN,A.G., tekhnicheskiy redaktor; MATVEYEVA,Ye.N.; tekhnicheskiy redaktor.

The effect of vertical forces on automobile wheels. Trudy NAMI no.65:1 '52.  
(MLRA 8:11)

1. Direktor NAMI (for Osipyan)  
(Automobiles--Wheels)

BRYZGOV, N.N., red.; KUTIKOV, G.S., otv. za vypusk; SUKHAREVA, R.A.,  
tekhn.red.

[New devices used in automotive transportation] Novye pribory  
na avtomobil'nom transporte. Moskva, 1959. 26 p. (Moskovskii  
dom nauchno-tekhnicheskoi propagandy. Peredovoi opyt proiz-  
vodstva. Seriya: Avtomobil'nyi transport, no.3).

(MIRA 13:10)

(Measuring instruments) (Transportation, Automotive)

BRYZGUOV, F. A.

Morskie vodorosli. Kratkoе naстavlenie po zagotovke morskikh vodoroslei (Seaweeds).  
Arkhangel'sk, obl. gos. izd-vo, 1952. 56 p.

SO: Monthly List of Russian Accessions, Vol 6, No. 3, June 1953

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307130007-0

BRYZGUNOV, F. A.

Science

Seaweeds, Arkhangel'sk, obl. gos. izd-vø, 1952

Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307130007-0"

27.2400

21385  
S/194/61/000/009/037/053  
D256/D302

21.6000

AUTHOR:

Bryzgunov, V.A.

TITLE:

Monitor for measuring  $I^{131}$  content in the human thyroid gland

PERIODICAL:

Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 9, 1961, 6, abstract 9 E44 (Med. radiologiya,  
1961, 6, no. 1, 65-68 (Summary in English))

TEXT:

The greater part of the iodine reaching the human body is absorbed by the thyroid so that the amount of  $I^{131}$  present in the thyroid serves a direct indication of the existing health hazard. An instrument sensitive to gamma-radiation in the hundred keV range was devised for measuring the  $I^{131}$  stored in the thyroid. A NaI-scintillation counter with a Ф3Y -25M (FEU-25N)-type photomultiplier tube was used as the detector, and it was placed in a lead shield. The pulses were amplified, the pulse-height being discriminated, and they were then converted into pulses of a standard

Card 1/2

X

Monitor for measuring I<sub>131</sub>...

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length and amplitude. The standard pulses were registered using an integrator of 0 - 20,000 pulses/min full scale divided into 4 ranges; the principle of the operation being based on a vacuum-tube voltmeter measuring the voltage across a capacitor charged by the pulses, the basic error of measurement was ~ 10% for each range. The instrument was calibrated using a dummy with probes containing a radioactive solution, and the efficiency was found to be  $5 \cdot 10^3$  pulses/min for 1 microcurie of I<sub>131</sub>. It was possible to measure activity of I<sub>131</sub> in the thyroid from 0.02 - 0.04 microcurie, this being 5 - 10 less than the maximum permissible content. For routine checking a control solution of Cs<sub>131</sub> was prepared, its gamma-ray energy being close to that of I<sub>131</sub>. The instrument is suitable for both medical diagnosis and therapy. 3 references. / Abstracter's note: Complete translation ]

Card 2/2

X

32003  
S/089/62/012/001/006/019  
B102/B138

21.6000

AUTHOR: Bryzgunov, V. A.

TITLE: Measurement of radioactivity of short-lived gases in a mixture of fission products

PERIODICAL: Atomnaya energiya, v. 12, no. 1, 1962, 40 - 47

TEXT: A method is described for measuring the activity of short-lived noble gas isotopes in a mixture of U<sup>235</sup> fission products. It is an improvement on an earlier method proposed by A. A. Chubakov. It can be used for measuring the activity of gaseous fission fragments in a continuous air-flow loop in uranium-graphite reactors. The fission products are filtered from the active gas by passing the latter through conical filters made of ФПА-15-2.0 (FPA-15-2.0) tissue in the ends of Al-alloy chambers. The systems investigated had volumes of up to 150 l and the gas flow rate could be varied from 1 to 20 l/min. The gas activity was determined from the activity of the daughter products collected at the filter, which was measured by a radiometer. The theory of this method is described in detail. The method was tested with the fragment gases

✓

Card 1/2

~~BYZGUNOVA, G.V.~~  
KAZANTS'YEVA, N.V.; BYZGUNOVA, G.V.

Method of preparing swine erysipelas formol vaccine on a pea-hydrolysate culture medium. Trudy Gos.nauch.-kont.inst.vet.prep. 4:416-417 '53.  
(MLRA 7:10)

1. Omskiy biokombinat.

(Erysipelas--Preventive inoculation) (Vaccines) (Bacteriology--Cultures and culture media)

BRYZGALOVA, Ye.V.; KLIMENKO, V.L.

Possibility of the utilization of shale gas for the production  
of chemicals. Trudy LIEI no. 46:27-33 :63. (MIRA 17:6)

1. BRYZGUNOVA, YE. V.
2. USSR (600)
7. "The Development of Filterable Forms of Bacteria in Culture on Liquid and Solid Nutrient Media", ("The Phasic Development and Variability of Microorganisms", Report 7), Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 2, 1951, pp 24-26.
9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

1. KALINA, G. P., ERYZGUNOVA, YE. V.
2. USSR (600)
3. "Formation of Filterable Forms of Bacteria When Mechanical and Physical Action is Exerted Upon the Microbe Population", ("Phasic Development and Variability of Microorganisms", Report 8), Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 2, 1951, pp 26-28.
4. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

BRYZGALOVA, Ye.V., kand.ekon.nauk

Basic problems in the determination of the economic efficiency  
of combined production. Trudy LIEI no.20:5-16 '57. (MIRA 11:9)  
(Industrial organization) (Oil shales)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307130007-0

*BRYZGUNOVA, Ye.V.*  
~~BRYZGUNOVA, Ye.V.; STOVBUN, F.I.~~

Visibility of pathogenic enteric bacteria in milk and milk products  
and their isolation. Vrach.delo no.12:1321-1323 D '57. (MIRA 11:2)

1. Bakteriologicheskiy otdel Chernovitskoy gorodskoy sanitarno-  
epidemiologicheskoy stantsii  
(DAIRY PRODUCTS--BACTERIOLOGY)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307130007-0"

*Br 42-7610/ia, 4c. N.*

STOVBUN, F.I., BRYZGUN~~VA~~, Ye.P., RUDENKO, I.I., BLAT, F.Z.

Work in improving sanitary conditions in butter production.  
Gig. i san. 23 no.5:55-57 My '58  
(MIRA 11:6)

1. Iz bakteriologicheskogo i pishchevogo otdelov Chernovitskoy  
gorodskoy sanitarno-epidemiologicheskoy stantsii.  
(BUTTER)

improvement in sanitary conditions of production (Rus)  
(SANITATION)

improvement in sanitary conditions of butter production  
(Rus))

*BRYZGUNOVA Ye. V.*  
STOVBUN, F.I.; KALINA, A.P.; BRYZGUNOVA, Ye.V.

Dynamics of changes in the composition of intestinal microflora in dysentery and in dysenterylike diseases in children; author's abstract.  
Zhur.mikrobiol.epid. i immun. 29 no.2:112-113 F '58.

(MIRA 11:4)

1. Iz bakteriologicheskogo otdela Chernovitskoy gorodskoy sanitarno-epidemiologicheskoy stnatsii.

(DYSENTERY, BACILLARY, in infant and child.  
intestinal bacteriol. changes in dysentery & dysentery-like infect. (Rus)

BRYZGALOVA, Ye.V., kand.ekonomicheskikh nauk; TSITOVICH, O.B., inzhener

Utilization of shale concentration wastes. Trudy LIEI no.36:121-  
125 '61.  
(Shale)

STOVBUN, F.I.; LABINOVA, M.M.; BRYZGUNOVA, Ye.V.

Study of the saccharolytic properties of Alcaligenes faecalis. Lab.  
delo 8 no.2:40-42 F '62.  
(MIRA 15:2)

1. Chernovitskaya gorodskaya sanitarno-epidemiologicheskaya stantsiya.  
(ALCALIGENES FAECALIS) (CARBOHYDRASES)

BRYZHAK, N.I. (g. Smolensk)

Improve the maintenance of bridges. Put' i put.khoz. 5 no.4:29  
Ap '61. (MIRA 14:7)  
(Railroad bridges—Maintenance and repair)

Bryzhayev L.D.

USSR/General Problems - Method and Technique of Investigation

A-4

Abst Journal : Referat Zhur - Fizika, No 12, 1956, 33681

Author : Bryzhayev, L. D., Titov, V. N.

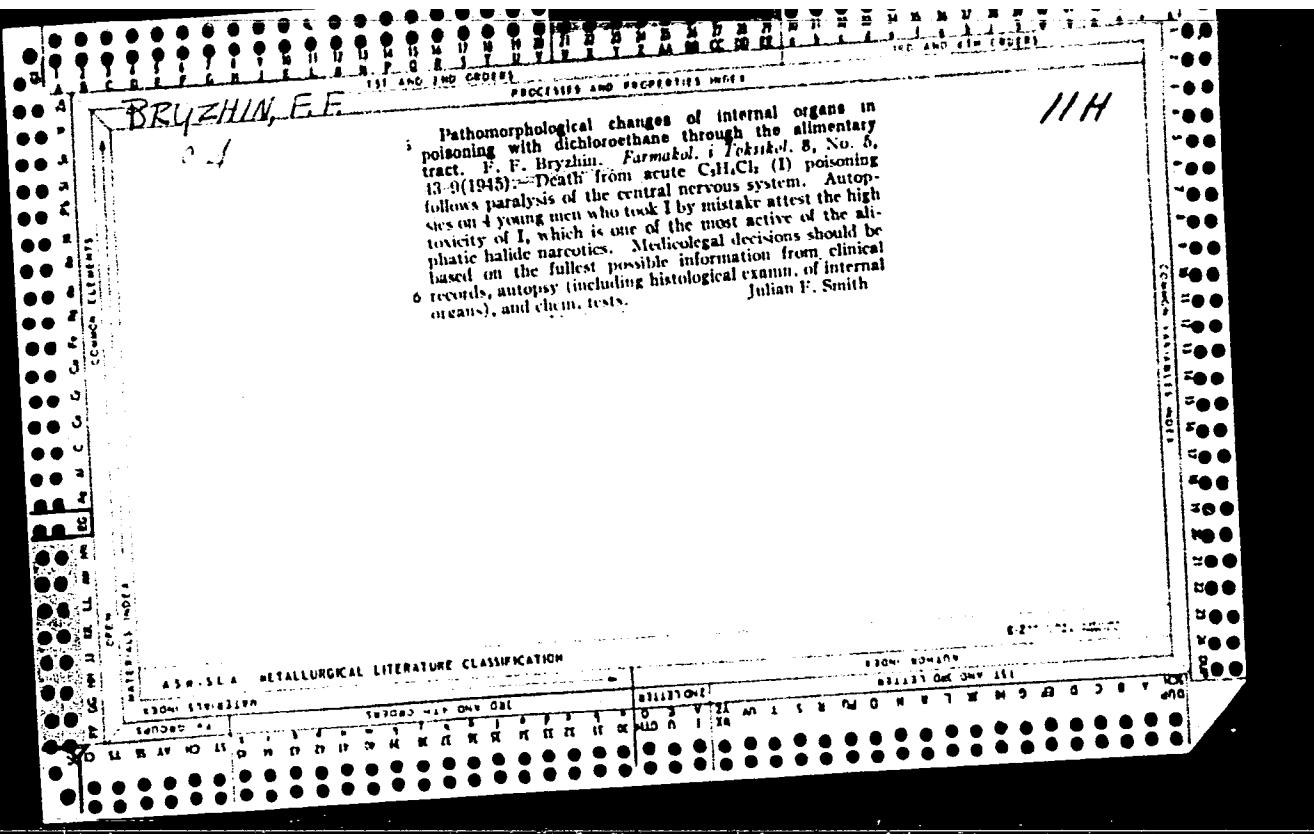
Institution : None

Title : Experimental Specimen of Underground Quartz Group Frequency Standard Using Transistors

Original Periodical : Izmerit. Tekhnika, 1955, No 1, 23-24

Abstract : A 60 kc standard frequency oscillator is built, using type KSV-3 transistors. The quartz element of the oscillator is a slab of square cross section, carrying out longitudinal oscillations at the second harmonic. The Q of the quartz element is approximately 300,000. The oscillator is fed from a dry cell and the voltage is stabilized by a standard cell operating under buffer conditions. A group of 4 identical oscillators is mounted in a special metallic shell 1.4 mm long and 90 mm in diameter, which is lowered in an underground well at a depth of 25 m. The mean-squared values of the daily variations of the relative deviations from the mean frequency value did not exceed  $1.0 \times 10^{-9}$ .

Card 1/1



BRYZHIN, G.

The correct disbursement of funds in state insurance organs. Fin.  
SSSR 17 no.5:73-76 My '56. (MLRA 9:8)  
(Insurance)

BRYZHIN, G.; RABINOVICH, I.

For the attention of the Central Administration of Government  
Insurance of the U.S.S.R. Fin. SSSR 17 no.9:64-68 S '56.  
(MLRA 9:10)  
(Insurance, Social)

BRYZHIN, G.

Why are there so many complaints in insurance organs of the  
R.S.F.S.R. Fin.SSSR 20 no.3:72-73 Mr '59. (MIRA 12:?)

1. Zamestitel' nachal'nika Glavnogo upravleniya Gosstralha  
RSFSR.  
(Insurance)

ISUPOV, V.A.; AGRANOVSKAYA, A.I.; BRYZHINA, M.F.

Crystalllochemical characteristics and certain physical properties of compounds with the structure of hexagonal tungsten oxygenic bronze. Kristallografiia 8 no.1:108-110 Ja-F'63

(MIRA 1787)

1. Institut poluprovodnikov AN SSSR.

40571

24.7/00

S/070/62/007/005/003/014  
E132/E460

AUTHORS: Zaslavskiy, A.I., Bryzhina, M.F.

TITLE: X-ray structural determination of the antiferroelectric  
 $Pb_2MgW_6$  and the system of solid solutions  
 $Pb_2MgW_6-PbTiO_3$ 

PERIODICAL: Kristallografiya, v.7, no.5, 1962, 709-717

TEXT: It has been established that the compound  $Pb_2MgW_6$  has a perovskite-type structure with an orthorhombic distortion giving a unit cell with parameters 22.69, 22.74 and 15.87 kX (corresponding to  $4a_c^{1/2}$ ;  $4b_c^{1/2}$ ; and  $4c_c$  where  $a_c$ ,  $b_c$  and  $c_c$  are the dimensions of the perovskite sub-cell). In the system  $PbMg_{1/2}W_{1/2}O_3 - PbTiO_3$  at room temperature there is a continuous range of solid solutions with the perovskite structure over the range 5 to 70 mol %  $PbTiO_3$ . At 45 mol %  $PbTiO_3$  there is a transition from the cubic paraelectric phase to a tetragonal, ferroelectric phase. In the cubic phase there is partial ordering of the small cations leading to the doubling of the cell side. This ordering gradually decreases with increasing  $PbTiO_3$  content. The degree of tetragonality increases with the second component. Parameters of the elementary cells were measured

Card 1/3

X-ray structural ...

S/070/62/007/005/003/014  
E132/E460

(Fig.4). Below 39°C,  $\text{Pb}_2\text{MgW}_6$  is antiferroelectric. The various powder, single crystal and diffractometer records were fully indexed and the displacements of the ions from the strictly cubic positions were not determined, but two factors lead to the appearance of the superstructure: a) three-dimensional ordering of the smaller cations in 0 octahedra ( $\text{Mg}, \text{W}, \text{Mg}, \dots$ ) doubling the cell side, and b) antiparallel displacements of the atoms producing further doubling. The space group is  $D_2^5 = C222_1$ . There are 4 figures and 2 tables.

ASSOCIATION: Institut poluprovodnikov AN SSSR  
(Institute of Semiconductors, AS USSR)

SUBMITTED: November 18, 1961

Card 2/3

X-ray structural ...

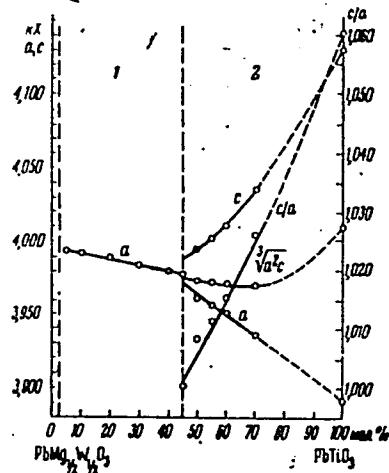
S/070/62/007/005/003/014  
E132/E460

Fig.4. Dependence of cell dimensions on composition.  
Card 3/3

BRYZHINA, M. F.

24.7100

45678

S/070/63/008/001/018/024  
E132/E460

AUTHORS: Isupov, V.A., Agranovskaya, A.I., Bryzhina, M.F.

TITLE: Crystallochemical characteristics and certain physical properties of compounds with the structure of the hexagonal tungsten oxygen bronzes

PERIODICAL: Kristallografiya, v.8, no.1, 1953, 108-110

TEXT: In the perovskite structure there are canals of square cross-section, in the tetragonal potassium tungsten bronzes canals of tetragonal and pentagonal cross-section and in the hexagonal rubidium tungsten bronzes large canals of hexagonal cross-section. In each case the carcase is made up of linked W<sub>6</sub> octahedra. In the latter structure the alkali ions (A) are 12-coordinated by oxygen at a distance p, 6-coordinated by oxygen at a distance q, and 2-coordinated by other A ions. This gives a total coordination of 20. These three conditions demand that the A ions should have radii 1.732 R<sub>o</sub>, 1.449 R<sub>o</sub> and 1.414 R<sub>o</sub> so these conditions cannot be satisfied simultaneously except by a deformable ion. To enter into this structure an A ion must be sufficiently big, must be sufficiently deformable and must not be highly charged. The following compounds have been found:

Crystallochemical characteristics ... S/070/63/008/001/018/024  
E132/E460

RbNb<sub>2</sub>O<sub>9</sub> ( $a = 7.39$  and  $c = 7.64 \text{ \AA}$ ); RbTa<sub>2</sub>O<sub>9</sub> ( $a = 7.35$  and  $c = 7.73 \text{ \AA}$ ); KNb<sub>2</sub>O<sub>9</sub> ( $a = 7.31$  and  $c = 7.79 \text{ \AA}$ ) and KTa<sub>2</sub>O<sub>9</sub> ( $a = 7.30$  and  $c = 7.62 \text{ \AA}$ ). At room temperature these compounds have relatively high dielectric constants (200 to 400) which increase with temperature. The structure leads to the expectation of ferroelectricity. The dielectric losses are, however, considerable. The preparation of single crystals would enable their dielectric properties to be more carefully investigated. There are 3 figures.

ASSOCIATION: Institut poluprovodnikov AN SSSR  
(Institute of Semiconductors AS USSR)

SUBMITTED: May 5, 1962

Card 2/2

L 4876-66 EWT(1)/EWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) JD

ACCESSION NR: AP5019839

UR/0181/65/007/008/2292/2297

AUTHORS: Yudin, V. M.; Gavrilishina, A. I.; Artem'yeva, M. V.;  
Bryzhina, M. F.

TITLE: Weak ferromagnetism of CaMnO<sub>3</sub>

SOURCE: Fizika tverdogo tela, v. 7, no. 8, 1965, 2292-2297

TOPIC TAGS: calcium compound, manganese compound, ferromagnetism,  
magnetic moment, Neel temperature

ABSTRACT: The purpose of the investigation was to observe weak ferromagnetism in new compounds and further investigation of the magnetic properties of weak ferromagnets. The tests were made on polycrystalline samples, using a magnetic balance and the Faraday method. The measurement procedure and the balance were described by the author elsewhere (with G. A. Smolenskiy, FTT v. 6, 3668, 1964). The tests have shown that CaMnO<sub>3</sub> has weak ferromagnetism with Neel temperature ( $T_N$ ) 123K and with a spontaneous magnetic moment 0.5 G-cm<sup>3</sup>/g

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ACCESSION NR: AP5019839

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at 77K. Below  $T_N$ , the magnetic susceptibility does not change with temperature, indicating that there is small anisotropy in one plane. The temperature dependence of the spontaneous magnetic moment deviates from the corresponding Brillouin function. The magnetic measurements yielded a value of 1060 or 1450 kOe for the exchange field, and a value of 12.5 kOe for the Dzyaloshinskiy field. The results are compared with data on other weak ferromagnets. The authors thank G. A. Smolenskiy for interest in the work and a discussion of the results, I. Ye. Myl'nikova<sup>74,55</sup> for a useful discussion with respect to the synthesis of the samples, and Ye. A. Dmitriyeva and N. N. Perfeneva<sup>55</sup> for the chemical analysis of the samples. Orig. art. has: 3 figures and 1 formula

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad (Institute of Semiconductors, AN SSSR)

SUBMITTED: 09Feb65

ENCL: 00

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OTHER: 009

OC  
Card 2/2

KRAYNIK, N.N.; ISUPOV, V.A.; BRYZHINA, M.F.; AGRANOVSKAYA, A.I.

Crystal chemistry of ferroelectrics having a structure of the type of tetragonal oxygenic tungsten bronze. Kristallografiia 9 no.3:352-357 My.-Je '64. (MIRA 17;6)

1. Institut poluprovodnikov AN SSSR.

L 43898-65 EED-2/EWT(1)/EWT(m)/EWA(c)/T/EWP(t) JD  
 ACCESSION NR: AP5006876 S/0181/65/007/003/0746/0749  
 AUTHOR: Davydov, L. A.; Poltinnikov, S. A.; Bryzhina, M. F.  
 TITLE: Magnetic spectra of lithium-zinc ferrites 11 21  
 SOURCE: Fizika tverdogo tela, v. 7, no. 3, 1965, 746-749 21  
 TOPIC TAGS: ferrite, lithium zinc ferrite, magnetic spectrum, electric resistivity, phase composition, crystal structure  
 ABSTRACT: Data are presented on x-ray phase analysis, electric resistivity, and magnetic spectra of a system of lithium-zinc ferrites with general formula  
 $\text{Li}_{0.5-x} \text{Zn}_x \text{Fe}_{2.5-x} \text{O}_4$  ( $x = 0-0.65$ ).  
 The polycrystalline samples were prepared in toroidal form using a standard ceramic technology. The x-ray phase analysis was made with an x-ray powder camera using chromium K $\alpha$  radiation and a vanadium filter. The x-ray phase analysis has shown that for values  $x > 0.2$  a noticeable quantity of additional phase with structure of NaCl type is produced (the main phase has the structure of cubic

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ACCESSION NR: AP5006876

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spinel), and that  $\text{Fe}^{2+}$  can occur in the supplementary phase. Consequently the electric resistivity of several samples was measured at room temperature. The measurements have shown that the resistivity increases with increasing ferrite zinc content up to  $x = 0.4$ , after which it decreased abruptly, probably due to the presence of  $\text{Fe}^{2+}$  ions which increased the conductivity. The magnetic spectra were measured in the range 1 - 4,000 Mcs at room temperature, using a Q-meter up to 150 Mcs, and measuring lines in the 150 - 4,000 Mcs range. The results show that the magnetic spectra of lithium-zinc ferrites are similar to those of other solid-solution ferrites containing zinc ferrite as one of the components. "In conclusion the authors thank G. A. Smolenskiy and A. G. Gurevich for guidance, and B. Ivanenko for help with the measurements of the electric resistivity of the samples." Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors, AN SSSR)

SUBMITTED: 08Aug64

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SUB CODE: SS , OP

NR REF Sov: 002

OTHER: 006

Card 2/2 n/8

L 15742-66 EWT(m)/EWP(w)/T/EWP(t)/EWP(b) IJP(c) JD  
ACC NR: AP6000897 SOURCE CODE: UR/0181/65/007/012/3695/3698  
AUTHORS: Bokov, V. A.; Mylnikova, I. Ye.; Kizhayev, S. A.; Bryzhina, M. F.; Grigoryan, N. A. 63  
ORG: Institute of Semiconductors, AN SSSR, Leningrad (Institut poluprovodnikov AN SSSR) 62 B  
TITLE: Structure and magnetic properties of  $\text{BiMnO}_3$   
SOURCE: Fizika tverdogo tela, v. 7, no. 12, 1965, 3695-3698  
TOPIC TAGS: bismuth compound, manganese compound, magnetic property, temperature dependence, Curie point, ferromagnetic material, solid solution, ferroelectricity  
ABSTRACT: The authors synthesized the  $\text{BiMnO}_3$  in the form of small whiskers, using a technique described elsewhere (FTT v. 6, 1240, 1964), and measured its magnetic properties at temperatures from 55K to room temperature at  $H_{\max} = 9.5$  kOe. They found  $\text{BiMnO}_3$  to be a ferromagnet

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with a Curie point at 110K. The large ferromagnetic moment of  $\text{BiMnO}_3$  is attributed to positive exchange interaction in the chains  $\text{Mn}^{3+} \cdots \text{O} \cdots \text{Mn}^{3+}$ . The authors also synthesized solid solutions  $\text{Bi}_{1-x}\text{Ca}_x\text{MnO}_3$  with  $x = 0.4, 0.3$ , and  $0.2$ , using a standard ceramic technique. An investigation of the magnetic properties of these solid solutions at temperatures from 77K to room temperature has shown that increasing  $\text{CaMnO}_3$  concentration the paramagnetic Curie temperature decreases.

The solid solution  $\text{Bi}_{0.6}\text{Ca}_{0.4}\text{MnO}_3$  has a maximum magnetic susceptibility at 155K. The drop in the paramagnetic Curie point with increasing  $x$  is related to a decrease in the distances between ions of the manganese in all three directions. The existence of the compound  $\text{BiMnO}_3$  and of solid solutions on its basis offers, in the authors' opinion, another possibility of obtaining ferroelectric-ferromagnets. Authors thank G. A. Smolenskiy for encouraging this work and for a discussion of the results. Orig. art. has: 2 figures

SUB CODE: 20, 11/ SUBM DATE: 23Jul65/ ORIG REF: 006/ OTH REF: 002

Card

2/2(X)

BRYZHIN, A.L.

Importance of calculating solar radiation in architecture of Central Asia. Izv. Otd. est. nauk AN Tadzh. SSR no.20:125-143 '57.  
(MIRA 11:8)

1. Upravleniye Glavnogo arkhitektora g. Anzhero-Sudzhenska i Stalinabadskaya astronomicheskaya observatoriya AN Tadzhikskoy SSR.  
(Soviet Central Asia—Architecture and climate)

GREBEN', L.K., akademik; BAYDUGANOVA, Ye.P., nauchnyy sotr.; SAVCHENKO, P.Ye., kand. biol. nauk; GREBEN', Ye.K., kand. sel'khoz. nauk; KRYLOVA, L.F., nauchn. sotr.; SIDOROVA, L.M., nauchn. sotr.; SOROKINA, V.I., nauchn. sotr.; BAGMET', M.I.; LAZORENKO, Ye.L.; KHOKHLYUK, A.G.; PASHKEVICH, M.K.; BRYZHNIK, K.A.; LUZHKOVA, M.A., kand. sel'khoz. nauk; BALASHOV, N.T., kand. sel'khoz. nauk; ZHELIKHOVSKIY, V.I., redaktor; POTOTSKAYA, L.A., tekhn. red.

[Ukrainian White Steppe swine] Ukrainskaia stepnaia belaia poroda svinei. Pod obshchei red. L.K.Grebenia. Kiev, Gos-sel'khozizdat USSR, 1962. 252 p. (MIRA 16:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut zhivotnovodstva stepnykh rayonov im. M.F.Ivanova "Askaniya-Nova."
  2. AN Ukr.SSR i Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I.Lenina (for L.K.Greben'). 3. Ukrainskiy nauchno-issledovatel'skiy institut zhivotnovodstva stepnykh rayonov im. M.F.Ivanova "Askaniya-Nova" (for Bayduganova).
  4. Melitopol'skaya gosudarstvennaya plemennaya stantsiya (for Bagmet, Lazorenko, Khokhlyuk). 5. Spetsialist sovkoza "Komsomolets", Stavropol'skiy kray (for Bryzhnik).

BRYZZHEV, I. D.

PA 43/49T30

USSR/Electronics  
Stroboscopes  
Vacuum Tubes

Apr 49

"Simple System for Obtaining Momentary Flashes of Light", L. D. Bryzzhev, Khar'kov State Inst of Measurements and Measuring Inst, 1 p

"Zavod Lab" Vol XIV, No 4

Operation and wiring diagram of a system to furnish light impulses in stroboscopic measurements, consisting of a TG-212, thyratron, & 5Ts4C kenotron and a neon television tube. If 0.05-microfarad condenser is used with a frequency of 50 cycles, period of flashes does not exceed 0.0001 sec.

43/49T30

BRYZZHEV, L. D.

USSR/Physics - Quartz clock

FD-576

Card 1/1      Pub. 153-16/28

Author : Bryzzhev, L. D., and Timov, V. N.

Title : Simple tuning-fork quartz clock

Periodical : Zhur. tekhn. fiz. 24, 879-883, May 1954

Abstract : Describe simple quartz clocks operating on the basis of a piezoquartz tuning fork with a frequency of 1000 cycles/sec. In addition to the second impulses the device gives frequencies of 100 and 1000 cycles at the output. The daily variation in the behavior of the clock is about  $\pm 0.002$  second, which corresponds to a relative change of frequency of  $\pm 2 \cdot 10^{-8}$ .

Institution :

Submitted : May 15, 1953

BRYZZHEV, L.D.; GRINENKO, I.V.; NOVGORODOV, Ye.D.; TITOV, V.N.

Piezoelectric tuning forks. Izm. tekhn. no.1:46-51 Ja-F '55.  
(Piezoelectricity) (MIRA 8:9)

BRYZZHEV, L.D.

An underground quartz-fork frequency generator. Izm. tekhn.  
no.2:18-19 Mr-Ap '55. (MIRA 8:9)  
(Piezoelectricity) (Electronic measurements)